

Time-series Forest Change, Land Cover/Land Use Conversion and Socio-economic Driving Forces in the Petén, Guatemala

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- Develop a land-cover/land-use change database of the Maya Biosphere Reserve (MBR) for 1974-97.
- Quantify forest clearing and regrowth rates by time period.
- Determine socio-economic factors that influence land-use change decisions.
- Satellite image change detection techniques were applied to time-series Landsat MSS and TM imagery to develop data on forest clearing rates and trends.
- Clearing to regrowth area ratios and patch characteristics varied among study sites for the different time periods.
- Agricultural reforms; i.e. fallow periods, mono-cropping, pasture development, harvest of non-timber forest products.
- Changes in domestic settlement incentives following assessment of change rates.
- Biosphere level monitoring and periodic updates are instrumental in NGO/donor conservation management strategy and policy development.

